VERTEBRAL ABNORMALITIES IN *MESOPOTAMICHTHYS SHARPEYI* AND *CARASOBARBUS LUTEUS* (Pisces, Cyprinidae) from Basrah, Iraq

by

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The skeletal abnormalities of fishes have been rather frequently reported from different parts of the world (Dawson, 1964, 1966, 1971 ; Dawson & Heal, 1976). Different reasons were attributed to these abnormalities such as the environmental stresses in the form of extreme temperature (Hubbs, 1959), unusual waters chemistry and genetic factors (Schultz, 1963). Therefore, it is worth reporting some abnormalities I have observed in Iraqi fishes.

Skeletal abnormalities were first noted in four *Mesopotamichthys sharpeyi* (Günther, 1874) brought form the market (fig. 1-4). Subsequently a sample of fifty *Carasobarbus luteus* (Heckel, 1843), varying in length from 22 to 80 cm, was made from Qarmat Ali at the junction of the Tigris and Euphrates in 1980. The skeletons were prepared after boiling the fish and then patiently removing the flesh. Out of the fifty specimens examined only three ones showed skeletal abnormalities (fig. 5-6). All the specimens are kept in the collection of the Marine Centre, University of Basrah, Basrah, Iraq.

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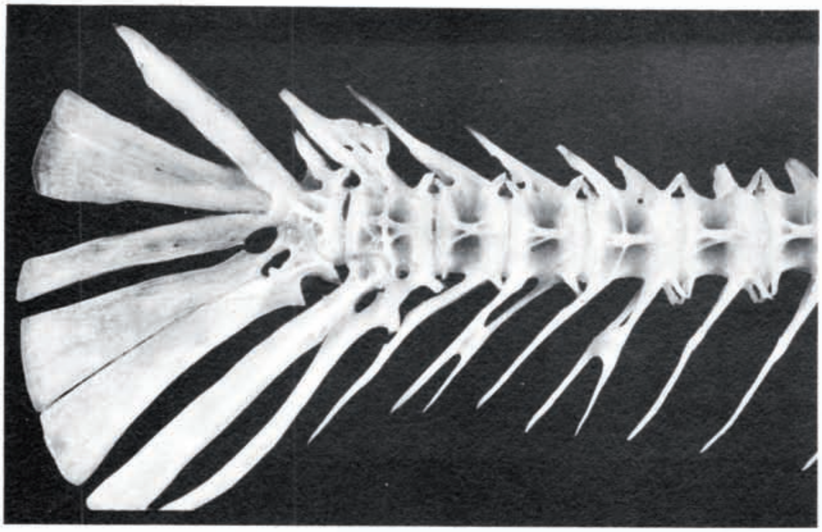

Fig. 1.– *Mesopotamichtys sharpeyi*, specimen 1. The last two vertebrae appear to have fused. In this complex vertebra although the two haemal processes are separate, both the neural processus are fused to form a single piece. Furthermore the haemal processes of the third and fourth caudal vertebrae (counting from the tail) are twisted.

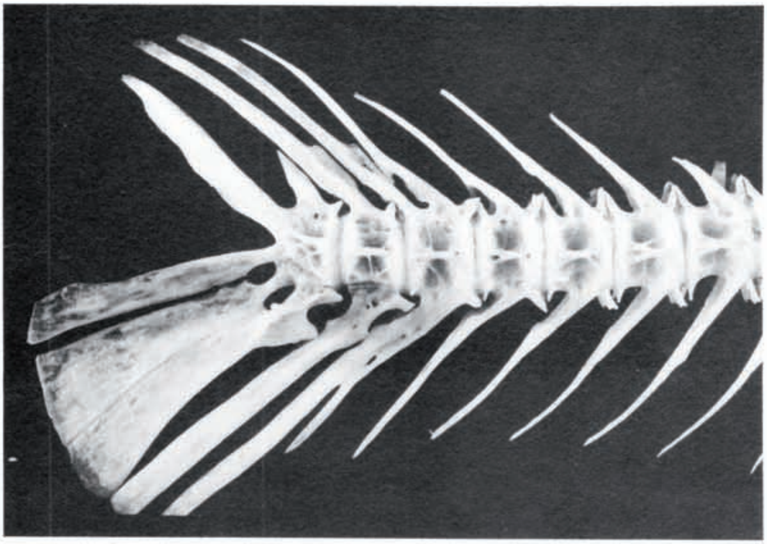

Fig. 2.– *Mesopomatichthys sharpeyi*, specimen 2. The complex penultimate caudal vertebrae, resulting from the fusion fo two vertebrae, possesses two neural and two haemal processes, the latter are fused at base.

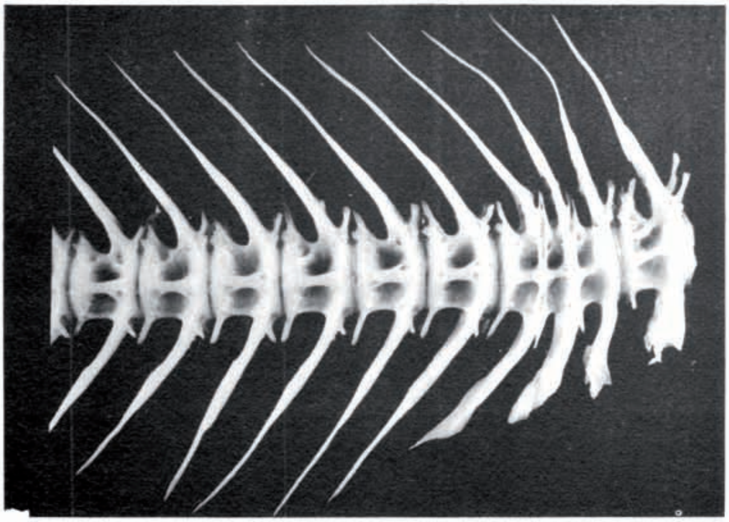

Fig. 3.– *Mesopomatichthys sharpeyi,* specimen 3. Three thoracic vertebrae are compressed, the haemal process of the last one is extended, the neural of the first two vertebrae are bent backward in the middle.

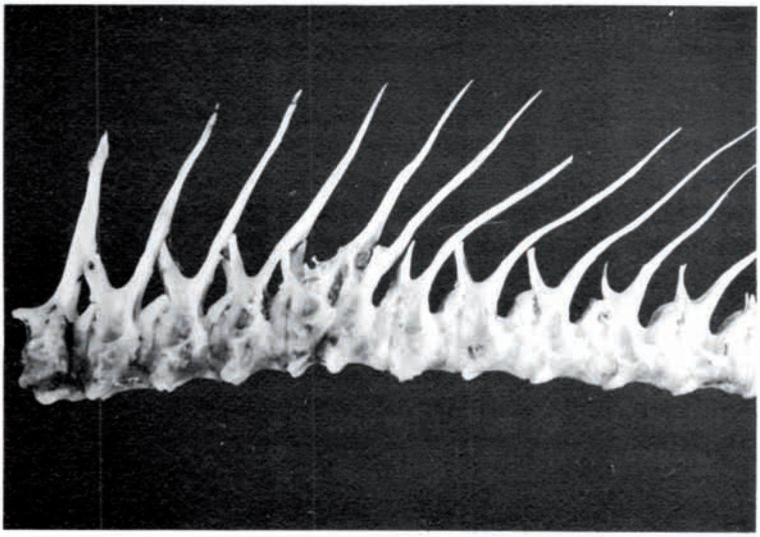

Fig. 4.– *Mesopomatichthys sharpeyi,* specimen 4. The posterior part of the centrum is totally absent in the fifth thoracic vertebra.

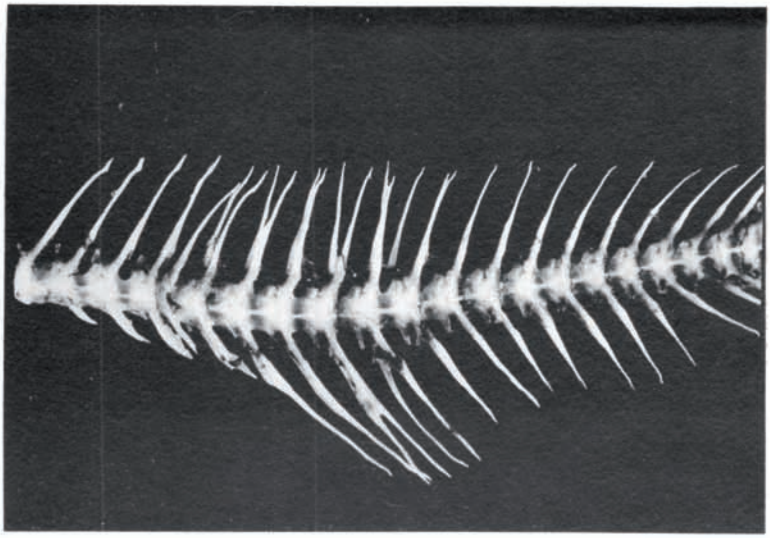

Fig. 5.– *Carasobarbus luteus*, specimen 1. In the antepenultimate thoracic vertebra, the posterior part of the centrum is completely absent. In the trunk region many vertebrae possess twisted neural and haemal processes.

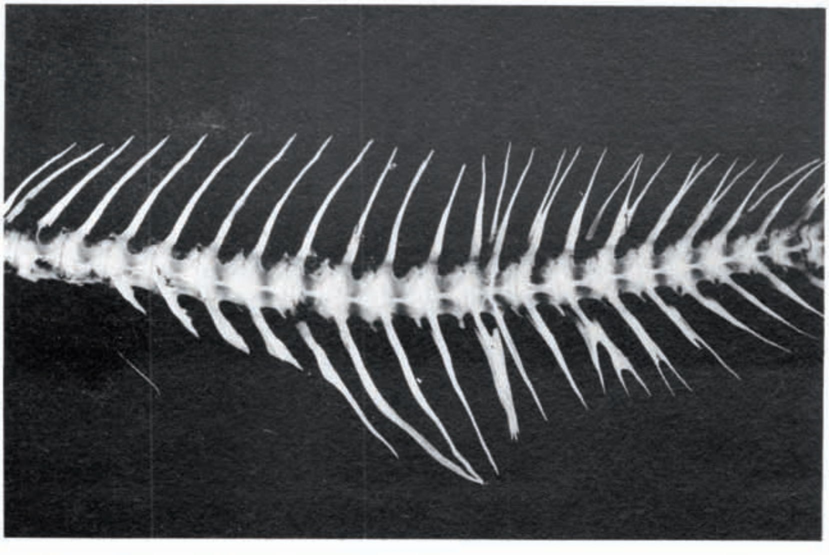

Fig. 6.– *Carasobarbus luteus*, specimen 2. One complex vertebra, the result of fusion of two vertebrae, with two neural and haemal processes are twisted in the same region. There haemal processes are bifurcated.